



U.S. Army Research Institute
for the Behavioral and Social Sciences

Study Note 96-02

Contract for Manpower and Personnel
Research and Studies for the
U.S. Army Research Institute for the
Behavioral and Social Sciences

Annual Report: Year Two

Human Resources Research Organization

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December 1995

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U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES

**A Field Operating Agency Under the Jurisdiction
of the Deputy Chief of Staff for Personnel**

EDGAR M. JOHNSON
Director

Research accomplished under contract
for the Department of the Army

Human Resources Research Organization

Technical review by

D. Witter

NOTICES

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14. ABSTRACT (<i>Maximum 200 words</i>): This report documents the second year of a 5-year project to provide the U.S. Army Research Institute for the Behavioral and Social Sciences short- and medium-term scientific and technical support in solving problems related to manpower and personnel. The three COMPRS programs are (1) quick reaction; (2) attitude and opinion surveys; and (3) medium term. During the second year of the contract, 10 delivery orders were initiated, 8 in the quick response program and 2 in the medium-term program. This report includes examples of problem and objective statements and summaries for each delivery order (including problem, objectives, status, results, bibliography, products, and planned documents and products). The intent is to give a very brief overview of each effort.					
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Annual Report: Year Two

Human Resources Research Organization

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CONTRACT FOR MANPOWER AND PERSONNEL RESEARCH AND STUDIES FOR THE
U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES--
ANNUAL REPORT: YEAR TWO

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CONTRACT FOR MANPOWER AND PERSONNEL RESEARCH AND STUDIES FOR THE U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES ANNUAL REPORT: YEAR TWO

Introduction

This report documents the two base years of a five year (two base years and three option years) project to provide the Army Research Institute (ARI) non-personal, short- and medium-term scientific and technical support services in the solution of problems related to manpower and personnel. The program is referred to as the Contract for Manpower and Personnel Research and Studies (COMPRS). HumRRO's primary responsibilities are to administer the COMPRS for ARI under firm fixed-priced contracts by managing three inter-related tasks: (1) managing the COMPRS program in accordance with established operating procedures, (2) receiving and processing individual Statements of Tasks from ARI, and (3) managing, reporting project progress, and documenting delivery order completion.

There are three programs under COMPRS. They are summarized below and are described in detail in Appendix A:

- **Quick Reaction (QR) Program** - Intended to provide ARI responsive, short-term research or studies and analysis dealing with manpower and personnel issues for which ARI in-house capability is not available. Each of the QR Program delivery orders (DOs) shall be completed within a period of time specified in the DO, with the maximum allowable completion normally being within 12 months of the date of the DO.
- **Attitude and Opinion Survey (AOS) Program** - Intended to give ARI the ability to conduct surveys to provide information for accession and force management decision-making. Each of the AOS Program DOs shall be completed within a period of time specified in the DO, with the maximum allowable completion normally being within 12 months of the date of the DO or 18 months if OMB approval is required.
- **Medium-Term (MT) Program** - Intended to give ARI the ability to conduct a limited number of research efforts or studies and analyses whose duration would not normally exceed 24 months after the contractor receives the DO.

Summary of Base Period Activities

During the first year of the contract, 22 delivery orders were initiated, to include DO# 0001 which provides for the overall management of the COMPRS. The remaining 21 delivery orders were divided among the three program areas as follows: QR Program, 12 DOs; AOS Program, 7 DOs; and MT Program, 2 DOs. Examples of the problem and objective statements for several delivery orders under each program area are shown in Figures 1-3, respectively. During the second year of the contract, 10 delivery orders were initiated. Eight of these DOs were in the QR program and two were in the MT program. Table 1 summarizes delivery order activity for the base year period.

Table 1. Summary of Delivery Order Activity

	Year 1	Year 2	Total
Number DOs Initiated	22	10	32
Contract Administration	1	0	1
Quick reaction	12	8	20
Attitude/Opinion Survey	7	0	7
Medium Term	2	2	4
Number DOs Active (as of June 1995)	8	7	15

DO# 0002

Title: Evaluation of the Effectiveness of Job Assistance Centers in the Army Career and Alumni Program (ACAP)

Problem: The Army required a proposal to evaluate the effectiveness of Job Assistance Centers that are part of the Army Career and Alumni Program (ACAP). The proposal was needed to determine the level of resources required to carry out a full-scale evaluation and to allocate funding and data sources.

Objectives: The objective of this project was to provide the Army Career and Alumni Program with a comprehensive evaluation plan that reflects the value to the Army and to the civilian sector of the efforts of Job Assistance staff members to prepare individuals to look for jobs.

DO# 0004

Title: Gender Integration of Basic Training

Problem: The U.S. Army wanted to study the attitudes of trainees and cadre toward gender-integrated and same gender basic entry training. Prior research has evaluated the performance of basic entry trainees in gender-integrated and same gender squads. However, the research did not measure the attitudes and opinions of either the trainees or training cadre of gender-integrated and same gender basic training squads.

Objectives: The proposed effort aimed at complementing earlier work. This effort had the following objectives: (1) To collect information on the attitudes and opinions of soldiers and training cadre about basic entry training in same gender and gender-integrated squads; (2) to describe training activities in the squads; (3) to assess performance by females and males in the squads; and (4) to identify changes--if any--in attitudes towards training and the performances of females and males. The results will be used to determine Army policy on gender integration of basic training.

Figure 1. Example delivery orders for QR program.

DO# 0003**Title:** Surveys of Nurses and Nursing Students

Problem: The Army Nurse Corps (ANC) comprises about 4,000 Registered Nurses (RNs). To maintain readiness, approximately 500 new recruits must be enlisted each year. The Army needed to obtain attitudes and perceptions of employed civilian nurses and nursing students toward serving in the Army Nurse Corps. The effects of Operation Desert Shield/Storm and military downsizing on attitudes were of particular concern. Data regarding the field of nursing and perceptions of the ANC among current and future RNs were required to accomplish this objective. This effort involved collecting survey data, analyzing data, and developing the database and supporting documentation.

Objectives: The objective of this project was to provide the Army with information on the nurse prospect market, by assessing attitudes and perceptions of nursing students and civilian nurses toward Army service. Comparative information about nurses' perceptions of military nursing and civilian nursing was needed to support Army advertising policy and enlistment incentive strategies in the post-Operation Desert Storm era.

DO# 0015**Title:** Revision of the Army Career Transition Survey (ACTS)

Problem: ARI developed an exit survey instrument, the Army Career Transitions Survey (ACTS), which is designed to be administered to soldiers who are separating from the Army. In a recent evaluation of the ACTS, a number of concerns were raised about the content of the ACTS and the procedures currently being used to administer the survey. Questions about the usefulness to sponsoring organizations within the Army of the data collected were also raised as were issues concerning the representativeness of the survey respondents.

The Office of the Deputy Chief of Staff of Personnel (ODCSPER, HRD) subsequently has asked ARI to revise the ACTS to insure that it addresses the specific areas of interest to Army planners and policy makers. To accomplish this task, the appropriate Army Commands will be interviewed to identify the topics of interests, the items on the current version will be reviewed and revised, and standardized administrative procedures will be developed for all administration sites.

Objectives: The objective of this project is to provide the Army with a revised exit survey that contains items that address the most important issues of interest to the Army. In addition, to help insure data consistency, completeness, and usefulness, administration procedures for ACTS will be revised.

This effort is designed to provide retention planners with better information about the reasons that made soldiers think about leaving the Army, and will provide improvements in the methods of monitoring trends and cycles. It will provide recruiting and marketing planners with enhanced indicators of the advice returning veterans are giving the Army's youth market.

Figure 2. Example delivery orders for AOS program.

DO# 0020

Title: Development of Measures for Sinai Peacekeeping

Problem: The purpose of this effort is to develop peacekeeping performance measures as part of a larger program to select candidates for peacekeeping operations. Behaviorally-based rating scales and job knowledge tests are to be developed to be used as performance criteria against which to validate selection measures currently being developed at ARI.

Objectives: The objective of this work is to develop measures of individual peacekeeping performance in the Sinai.

DO# 0032

Title: Modeling the Individual Enlistment Decision

Problem: The Office of the Deputy Chief of Staff for Personnel asked the U.S. Army Research Institute (ARI) to identify and evaluate factors influencing the enlistment decision and the propensity to serve in the military. Existing data bases have been primarily developed for other reasons (e.g., to track population trends) and are of limited use in developing a general model of factors influencing the enlistment decision or the propensity for military service. Additional data are required to address and quantify the role of factors that may influence the decision to join the military.

Objectives: This is Phase I of a three phase effort. The primary objectives of this effort are to develop alternative models of the enlistment decision and to identify, construct, and pilot measures of enlistment propensity and factors that influence the decision process.

Figure 3. Example delivery orders for MT program.

Summaries for each delivery order initiated during the base period of the contract (Year 1 and Year 2) follow. Each summary provides the following information:

- The delivery order number and title.
- The program area.
- The delivery order contracting officer's representative (DO-COR), assistant DO-COR, if one is assigned, and the contractor's project director.
- A statement of the problem.
- The objectives of the delivery order effort.
- The delivery order status (either ongoing or completed), to include the dates.
- The results (if completed) or the results to date (if ongoing).
- Three sections describing documents and products--a bibliography section, a products section, and a section on planned documents and products. These final sections include only the most significant documents and products, not the standard requirements of each delivery order, such as a management plan, data collection instruments, and the like. Each delivery order has a final report associated with it. That document is identified as [Final Delivery Order Report] and is either in the Bibliography for completed efforts or in the Planned Documents and Products for ongoing efforts.

These summaries are not intended to provide significant detail about each delivery order; that information can be provided by the DO-COR upon request. The summaries are intended to give a very brief overview of each effort as well as to provide a snapshot of the contract's activities.

DO# 0001	Title: Contract Administration/Reports/Other Deliverables
Program Area QR _____ AOS _____ MT _____	DO-COR: Dr. David Witter DO-ACOR: Project Director: Dr. Deirdre Knapp
DO Summary	
<p>Problem: Providing information on manpower and personnel issues to Army decision-and policy-makers is often a complex, dynamic, multi-stage, iterative process. The accuracy and timeliness of information provided to decision makers are of paramount importance in affecting the quality of decisions and policies. Over the next decade, the U.S. Army will experience an increasing requirement to bring individuals into the Army who are trainable in a wide variety of skill areas. To meet and maintain its high quality manpower needs of the 1990's, the Army will have to develop and implement programs that allow it to locate, assess, assign, and use human resources more efficiently and effectively than it ever has before. As new Army policies are being developed to enhance the Army's ability to man the force, the Army needs programs of research and studies that will provide a quick response mechanism to gather and analyze data on the expected or actual short-term effectiveness of those policies.</p> <p>Scientific and technical support services are being used that lead to the development and implementation of programs of research and studies on the expected or actual effectiveness of Manpower, Personnel, and Training (MPT) programs. These efforts are part of ARI's MPT program to man the force by conducting research and studies to improve the Army's ability to recruit, identify, assess, classify, assign, lead, train, and maintain the personnel required for the Army.</p>	
<p>Objectives: The objectives of this delivery order are to administer the Contract for Manpower and Personnel Research and Studies (COMPRS) for ARI under firm fixed-priced contracts by managing three inter-related tasks: (1) managing the COMPRs program in accordance with established operating procedures, (2) receiving and processing individual Statements of Tasks from ARI, and (3) managing, reporting project progress, and documenting delivery order completion.</p>	
<p>Status: Ongoing (July 1, 1993-June 30, 1995)</p>	
<p>Results: Described further under each Delivery Order Summary</p>	
<p>Bibliography: See each Delivery Order Summary</p>	
<p>Products: The following Delivery Orders were issued during Year 1:</p> <ul style="list-style-type: none"> • DO 0001 Contract Administration/Reports/Other Deliverables • DO 0002 Evaluation of the Effectiveness of Job Assistance Centers in the Army Career and Alumni Program (ACAP) • DO 0003 Survey of Nurses and Nursing Students • DO 0004 Gender Integration of Basic Training • DO 0005 Design and Develop Prototype Army officer Personnel Inventory, Cost and Compensation (OPICC) Model • DO 0006 Evaluation of Job Assistance Centers in the Army Career and Alumni Program (ACAP) • DO 0007 Army Tests, Evaluations, and Experimentation with Army Combat Division Structure • DO 0008 1991 Guard/Reserve Survey of Officers and Enlisted Personnel: File Weighting • DO 0009 Sampling Plan for the 1994 Health Care Survey of DoD Beneficiaries • DO 0010 Economic and Occupational Analyses of 1992 DoD Reserve Surveys • DO 0011 Methods for the Evaluation of C2 Systems • DO 0012 Improving Family Adaptation to the Stresses of Family Life • DO 0013 Support for Review of Army Occupational Survey Program • DO 0014 1993 Population Representation in the Military Services Report (POPREP93) • DO 0015 Revision of the Army Career transition Survey (ACTS) • DO 0016 Update of Army Research Institute's Officer and Enlisted Personnel Research Data Bases for 1993 and 1994 • DO 0017 Preparing a Book on Computerized Adaptive Testing Version of the Armed Services Vocational Aptitude Test Battery (CAT-ASVAB) • DO 0018 Exploring Human Dimensions of Battle Command • DO 0019 Phase 1: Promotion and Professional Development in a Smaller, CONUS-based Army • DO 0020 Development of Measures for Sinai Peacekeeping • DO 0021 Longitudinal research on Officer Careers (LROC) • DO 0022 Impact of Battalion Peacekeeping Requirements on the Sponsoring Army National Guard Division 	

Products: The following Delivery Orders were issued during Year 2:

- DO 0023 Identifying the Attrition Problem and Its Solutions
- DO 0024 Modeling the Enlistment Decision with Army Communication Objectives Measurement Systems Data
- DO 0025 Research Findings on Soldier Selection and Their Implications for Army Policy and Programs
- DO 0026 Intercultural Communication Analysis for Special Forces
- DO 0027 Phase 2: Promotion and Professional Development in a Smaller, CONUS-Based Army
- DO 0028 Soldier Selection Database Maintenance
- DO 0029 FY 1994 Population Representation in the Military Services Report (POPREP94)
- DO 0030 Selection and Assessment Support for Special Operations Forces: Phase I
- DO 0031 Technology Review of the Use of Continuous Speech Recognition for Language Training
- DO 0032 Modeling the Individual Enlistment Decision

Documents and Products:

Human Resources Research Organization (1994). Contract for Manpower and Personnel Research and Studies for the U.S. Army Research Institute for the Behavioral and Social Sciences: Annual report (ARI Study Note 95-01).

See each Delivery Order Summary for additional documents and products.

DO# 0002	Title: Evaluation of the Effectiveness of Job Assistance Centers in the Army Career and Alumni Program (ACAP)
Program Area QR <input checked="" type="checkbox"/> AOS _____ MT _____	DO-COR: Dr. Joan Harman DO-ACOR: Project Director: Dr. Robert Sadacca <div style="text-align: right;">DO Summary</div>
Problem: The Army required a proposal to evaluate the effectiveness of Job Assistance Centers that are part of the Army Career and Alumni Program (ACAP). The proposal was needed to determine the level of resources required to carry out a full-scale evaluation and to allocate funding and data sources.	
Objectives: The objective of this project was to provide the Army Career and Alumni Program with a comprehensive evaluation plan that reflects the value to the Army and to the civilian sector of the efforts of Job Assistance staff members to prepare individuals to look for jobs.	
Status: Completed (July 21, 1993-August 13, 1993)	
<p>Results: Job Assistance Centers (JAC) provide assistance to Army service personnel, civilian employees, and their family members who are transitioning from military jobs to employment in the civilian sector. Services provided by the JAC are designed to prepare individuals for a successful job search. The centers run under auspices of the Army Career and Alumni Program (ACAP) which is part of the DoD Transition Assistance Program. The National Defense Authorization Act of 1991 requires that the Departments of Defense, Labor, and Veterans Affairs provide job transition assistance to military and civilian personnel who would lose their jobs due to installation closures and the downsizing and consolidation of military units. The JAC program is the Army's response to that mandate.</p> <p>The Department of Labor (DoL), also in response to the Congressional mandate, has established Transition Assistance Offices (TAO) near DoD installations nationwide. The JAC and TAO often serve the same Army and other DoD installations. The programs of assistance provided by the JAC and TAO, however, are designed to complement each other. The DoL program provides group seminars or classes designed to increase the general job search skills of the separating service personnel. The JAC, on the other hand, provide more individualized counseling services geared to the particular vocational experience and plans of the transitioning soldiers, Army civilians, and their family members. Questions have been raised about the cost effectiveness of maintaining the JAC program at locations where the DoL program is also available (the DoL program is not available overseas). Specifically, the added value of the JAC program to transitioning Army personnel and their family members has been questioned by the DoD Inspector General. Essentially, this evaluation of the JAC is being conducted to determine the answer to three basic questions:</p> <ol style="list-style-type: none"> 1. How do JAC clients compare with non-JAC clients in regard to post-separation employment? 2. Which JAC services have the most impact on success in achieving employment? 3. Considering the additional costs of providing JAC services, are the added benefits derived from the program cost effective? <p>The first question can be answered in a number of ways depending upon the aspect of employment/unemployment examined. Several types of program criterion or outcome measures could be obtained on separate samples; these measures would constitute the dependent variables in the planned multivariate analyses. The analyses would focus on differences in post-separation employment of recipients and non-recipients of JAC services while controlling for personal and family factors and the military job experience of the sampled individuals. The answer to the second question would also be answered through multivariate analyses. Whether or not individuals received given JAC services can be ascertained from the JAC database and confirmed in follow-up interviews. Variables measuring receipt/nonreceipt of particular services can be created. The effects (direct, indirect, and total) of these measures on the outcome measures can then be ascertained within the context of model(s) that attempt to capture the interrelationships among all the variables of interest. The third question may be the most difficult to answer. Assuming that the multivariate analyses indicate that individuals who received JAC services are more successful in obtaining post-separation employment, the employment differential or program benefits obtained must be evaluated in terms of the monetary costs of providing the job assistance services.</p>	
Bibliography: Sadacca, R., Harris, D.A., & Laurence, J.H. (1993). <u>Plan for the evaluation of Job Assistance Centers</u> . HumRRO Final Report FR-PRD-93-25. Alexandria, VA: Human Resources Research Organization (HumRRO). (ARI Study Note 94-03, November 1994) [Final Delivery Order Report]	
Products:	
Planned Documents and Products:	

DO# 0003	Title: Surveys of Nurses and Nursing Students
Program Area QR _____ AOS <input checked="" type="checkbox"/> MT _____	DO-COR: Dr. Ronald B. Tiggle DO-ACOR: CPT Mike Stehlik Project Director: Dr. Peter F. Ramsberger <div style="text-align: right;">DO Summary</div>
<p>Problem: The Army Nurse Corps (ANC) comprises about 4,000 Registered Nurses (RNs). To maintain readiness, approximately 500 new recruits must be enlisted each year. The Army needed to obtain attitudes and perceptions of employed civilian nurses and nursing students toward serving in the Army Nurse Corps. The effects of Operation Desert Shield/Storm and military downsizing on attitudes were of particular concern. Data regarding the field of nursing and perceptions of the ANC among current and future RNs were required to accomplish this objective. This effort involved collecting survey data, analyzing data, and developing the database and supporting documentation.</p>	
<p>Objectives: The objective of this project was to provide the Army with information on the nurse prospect market, by assessing attitudes and perceptions of nursing students and civilian nurses toward Army service. Comparative information about nurses' perceptions of military nursing and civilian nursing was needed to support Army advertising policy and enlistment incentive strategies in the post-Operation Desert Storm era.</p>	
<p>Status: Completed (July 29, 1993-September 30, 1994)</p>	
<p>Results: The 1993 U.S. Army Survey of Registered Nurses and Survey of Nursing Students was conducted to collect information on such issues as reasons for entering the profession, satisfaction with various aspects of nursing, future plans, and perceptions of Army nursing. A report was prepared to supplement the survey data by providing an overview of the profession at a time of rapid and far-reaching change. Among the major findings are the following:</p> <ul style="list-style-type: none"> • For many years, discussions regarding the field of nursing were dominated by concern over an on-going shortage of RNs. This shortage was attributed to a number of factors, including: a smaller number of well-prepared, college-bound youth; a failure to attract sufficient numbers of individuals to the field; and a decrease in job satisfaction due to relatively low pay and prestige, as well as working hours and conditions. • Beginning around 1991, hiring freezes and hospital staff cutbacks led to a reversal of the nurse shortage. The national vacancy rate for hospital RN positions fell to 5 percent in 1992, as compared to 11 percent just two years earlier. The military also saw recruiting problems diminish; in 1993 the Army Nurse Corps (ANC) actually surpassed its mission for active duty RNs. This sudden reversal of fortunes is not attributable to a decrease in demand, but rather to changing health care practices (e.g., shorter hospital stays, more out-patient and alternative setting care), as well as a trend within the health care profession to hold down costs by doing more with less. • An examination of the demographics of the nursing profession reveals that, although the field is still predominately female (96.5 percent), there has been an upward shift in age among both new and established RNs. The majority of working RNs are now in their thirties and forties. As might be expected, the percentage of male nurses is higher in the military, representing 28 percent of the ANC. Minority participation in the field is rising in both the civilian and military arenas. • The number of Associate, Bachelor, and graduate degree programs is increasing in response to an expanded demand for nursing education. This demand is reflected in the greater numbers of applications denied, and an increase in the incidence of waiting lists for admission to nursing programs. In 1991 there were increases in the number of graduations from associate degree (10.6 percent), diploma (18.7 percent), bachelors (8.8 percent), and graduate (6-8 percent) programs. In the ANC, some 20 years after instituting a Bachelor of Science in Nursing (BSN) requirement for acceptance, 100 percent of Army nurses now have BSNs, while some 35 percent hold advanced degrees. • In recent years, efforts have been made to establish higher starting salaries and a greater link between educational attainment and earnings. However, concerns still exist that the upper limits on RN salaries results in wage compression, with relatively smaller differences (as compared to other fields) between the earnings of those with varying levels of tenure. • Among the incentives that have been used to recruit and retain nurses are educational benefits, career advancement and development opportunities, participatory management, flexible working hours, on-site child care, and cash incentives/bonuses. To be effective, the type of benefits offered must correspond to the needs of those being sought. Given the upward shift in the ages of both incumbent and new RNs, an emphasis on the concerns of the more mature employee is warranted. 	

Both military and civilian nursing are going through a time of great change. On the civilian side, the move towards "rightsizing" and other forms of increasing profits through greater efficiency has led to a tightening of the RN market, particularly for newly-graduated nurses. How long this situation will continue is uncertain. Factors that could well lead to another nursing shortage include the aging population, the AIDS epidemic, and national health care proposals that include an increased role for nurses in health care administration. Military nursing is also in a state of flux, as the drawdown is resulting in a reduction in the number of RNs that will be recruited and/or retained. Further, there is evidence that the downsizing is having a negative impact on the propensity of youth to consider serving.

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Ramsberger, P.F., Barnes, J.D., DiFazio, A.S., & Tiggle, R. (1994). The U.S. Army Survey of Registered Nurses and the U.S. Army Survey of Nursing Students: Methodology and Results. Alexandria, VA: Human Resources Research Organization. [Final Delivery Order Report]

Products:

Survey of Nurses and Nursing Students.

U.S. Army Survey of Civilian Registered Nurses.

Planned Documents and Products:

DO# 0004	Title: Gender Integration of Basic Training
Program Area QR <input checked="" type="checkbox"/> AOS _____ MT _____	DO-COR: Dr. Jacqueline A. Mottern DO-ACOR: Dr. Morris P. Peterson Project Director: Dr. Shelley Perry
DO Summary	
<p>Problem: The U.S. Army wanted to study the attitudes of trainees and cadre toward gender-integrated and same gender basic entry training. Prior research has evaluated the performance of basic entry trainees in gender-integrated and same gender squads. However, the research did not measure the attitudes and opinions of either the trainees or training cadre of gender-integrated and same gender basic training squads.</p>	
<p>Objectives: This effort had the following objectives: (1) to collect information on the attitudes and opinions of soldiers and training cadre about basic entry training in same gender and gender-integrated squads; (2) to describe training activities in the squads; (3) to assess performance by females and males in the squads; and (4) to identify changes--if any--in attitudes towards training and the performances of females and males.</p>	
<p>Status: Completed (August 2, 1993-March 31, 1994)</p>	
<p>Results: Male and female soldiers entered basic training centers (BCT) with a strong sense of pride and commitment to the Army and a positive opinion about Army career opportunities and values. Although, overall, males seemed a bit more confident, both genders expressed a high degree of confidence in their ability to accomplish specific BCT events successfully, as well as cope with the demands of a military environment.</p> <p>BCT appears to have been a very positive event for the soldiers in the sample. Most (between 50 and 80 percent), regardless of their self-reported entry-level ability, reported some type of improvement as a result of the training. Response differences across the eight postsurvey composites appeared to be associated more with the gender of the soldier than the type of training (i.e., single-gender or gender-integrated) received. Female responses were significantly more positive than males in the areas of men and women in combat and leadership, affirmative pressure from drill sergeants, perceptions of gender differences, and impact of gender integration. Male responses were significantly more positive than females in the areas of Army career opportunities and values, and platoon teamwork/cohesion. No overall gender differences were noted for responses to pride and commitment to the Army, or with confidence in drill sergeants.</p> <p>Comparisons of soldiers receiving the single-gender BCT to soldiers receiving the gender-integrated BCT revealed significant differences only in the following four areas: men and women in combat and leadership, confidence in drill sergeants, affirmative pressure from drill sergeants, and perceptions of gender differences. The responses of the single-gender trained group were more positive in all four of these areas. Single-gender males, compared to males trained in the gender-integrated environment, were consistently more positive in the areas of platoon teamwork/cohesion, confidence in drill sergeants, affirmative pressure from drill sergeants, and perceptions of gender differences. These were the only significant differences noted when comparing the two groups.</p> <p>Females trained in the gender-integrated units were significantly more positive than females trained in single-gender units in their response to items addressing platoon teamwork/cohesion, confidence in drill sergeants, and perceptions of gender differences. Single-gender trained females were more positive about affirmative pressure from drill sergeants.</p> <p>Changes in soldier attitudes/opinions, as a result of BCT, were measured in the following areas: Army career opportunities and values, pride and commitment to the Army, and men and women in combat and leadership. Significant changes in soldier attitudes/opinions were observed across all three of these areas. Overall, except for females who did not record a change in attitude/opinions, shifts were positive with regard to Army career opportunities and values. All changes were in a negative direction for pride and commitment to the Army, and men and women in combat and leadership. No changes in soldier career plans were noted.</p> <p>Training cadre were much more positive toward the conduct of BCT in a single-gender environment than a gender-integrated environment. They recommended that gender integration of the soldier's initial entry training be initiated at the time of advanced individual training, not during BCT.</p>	
<p>Bibliography:</p> <p>Perry, M.S., Helmick, J.C., Hintze, D.W., & Marshall-Mies, J.C. (1994). <u>Gender integration of basic entry training: A study of soldier attitudes toward single-gender and gender-integrated training</u>. Final Study Report Volume I. Rockville, MD: Westat, Inc. [Final Delivery Order Report]</p> <p>Marshall-Mies, J.C., Perry, M.S., Helmick, J.C., & Hintze, D.W. (1994). <u>Gender integration of basic entry training study, focus group results</u>. Final Study Report Volume II. Rockville, MD: Westat, Inc. [Final Delivery Order Report]</p> <p>Helmick, J.C., Hintze, D.W., & Perry, M.S. (1994). <u>Gender integration of Basic entry training study, technical manual</u>. Rockville, MD: Westat, Inc.</p>	
<p>Products:</p> <p>Final Questionnaires and Survey Materials.</p>	
<p>Planned Documents and Products:</p>	

DO# 0005	Title: Design and Develop Prototype Army Officer Personnel Inventory, Cost and Compensation (OPICC) Model
Program Area QR <u>X</u> AOS _____ MT _____	DO-COR: Dr. Peter M. Greenston DO-ACOR: LTC Brad Loo Project Director: Dr. Patrick C. Mackin
DO Summary	
<p>Problem: In the present downsizing environment, brought on by diminished external threats and lower defense budgets, there is a pressing (and on-going) need for an improved analysis capability within the Army for personnel and manpower policy and officer management. The 7th QRMCC has proposed changes in compensation policy. The implications of these changes need to be addressed. For example, the impact upon officer quality and experience distributions of a 15 year retirement program should be assessed.</p> <p>In moving toward a smaller force structure, the potential impacts of various proposals have to be understood, such as early separation incentives, changes in promotion rules and practices, and signing bonuses following completion of initial service obligation. There is a continuing need to ascertain the impact of various military compensation proposal changes, taking into account projected labor market conditions and civilian wage growth.</p> <p>To meet this need the Army requires a PC-based policy analysis model in which compensation and other personnel policy changes can be expressed in model variables and/or parameters, the effects upon retention determined, consequent impact upon inventories projected, and the impact upon personnel costs estimated.</p>	
<p>Objectives: The objective of this project was to estimate a multi-period econometric model of Army officer retention for the OPMD officer force and to design, code, test, and implement a PC-based policy analysis tool suitable for examining the effects of compensation and other personnel policy changes upon the inventory of Army officers and for predicting these effects over a six-year projection horizon.</p>	
<p>Status: Completed (August 27, 1993-February 17, 1995)</p>	
<p>Results: Project staff successfully estimated a thirteen-period panel probit (ACOL-2) retention model for the Army OPMD officer force. The model used data on voluntary retention decisions from FY1979 through FY1992 and years of service 3 through 15. The results of this estimation were incorporated in the Officer Personnel Inventory, Cost and Compensation (OPICC) inventory-projection model.</p> <p>The OPICC model allows for a variety of policy scenarios to be manipulated by users, including future pays, severance options, retirement, unemployment, inflation, and accessions. In addition, users may model promotion behavior using three different approaches. The model explicitly tracks inventory across four dimensions: years of service, pay grade, time in grade, and remaining obligation. Finally the model automates the inventory update process to allow ARI to build new inventories from a raw extract of the Officer Master File. Model validation included running the model against historical retention behavior to compare predicted and observed results. ARI analysts and DCSPER personnel participated in training sessions to gain an understanding of OPICC's operation and capabilities.</p> <p>A software utility was also developed to allow ARI analysts to access three research data bases--the OLRDB, EPRDB (25% sample), and EPRDB (100% sample)--on CD-ROM.</p>	
<p>Bibliography: Mackin, P.C., Hogan, P.F., & Mairs, L.S. (1994). <u>Estimation of Retention Parameters for the Prototype Officer Personnel Inventory, Cost, and Compensation (OPICC) Model- Final Report.</u> [Final Delivery Order Report]</p>	
<p>Products: <u>Design and Develop Prototype Officer Personnel Inventory, Cost, and Compensation (OPICC) Model: Software and Data.</u></p> <p>O'Brien, K., & Mackin, P. (1994). <u>Officer personnel inventory, cost and compensation model: User manual.</u></p> <p>Lewis, D. (1994). <u>CD-ROM Database Access Utility Version 1.1 - User's Guide.</u></p>	
<p>Planned Documents and Products:</p>	

DO# 0006	Title: Evaluation of Job Assistance Centers in the Army Career and Alumni Program.
Program Area OR _____ AOS <u>X</u> MT _____	DO-COR: Dr. Joan Harman DO-ACOR: _____ Project Director: Dr. Janice Laurence
DO Summary	
<p>Problem: The Army needs to evaluate the effectiveness of Job Assistance Centers (JAC) that are part of the Army Career and Alumni Program (ACAP). This work entails interviewing DoD individuals who have been separated from their military or civilian jobs about their employment status. Job assistance centers provide assistance to Army service personnel, civilian employees, and their family members who are transitioning from military jobs to employment in the civilian sector. Services provided by the JAC are designed to prepare individuals for a successful job search. The centers run under auspices of the ACAP which is part of the DoD Transition Assistance Program. The National Defense Authorization Act of 1991 requires that the Departments of Defense, Labor, and Veterans Affairs provide job transition assistance to military and civilian personnel who would lose their jobs due to installation closures and the downsizing and consolidation of military units. The JAC program is the Army's response to that mandate.</p> <p>The Department of Labor (DoL), also in response to the Congressional mandate, has established Transition Assistance Offices (TAO) near DoD installations nationwide. The JAC and TAO often serve the same Army and other DoD installations. The programs of assistance provided by the JAC and TAO, however, are designed to complement each other. The DoL program provides group seminars or classes designed to increase the general job search skills of the separating service personnel. The JAC, on the other hand, provide more individualized counseling services geared to the particular vocational experience and plans of the transitioning soldiers, Army civilians, and their family members. Questions have been raised about the cost effectiveness of maintaining the JAC program at locations where the DoL program is also available (the DoL program is not available overseas). Specifically, the added value of the JAC program to transitioning Army personnel and their family members has been questioned by the DoD Inspector General. This evaluation of the JAC was conducted to determine the answer to three basic questions:</p> <ol style="list-style-type: none"> 1. How do JAC clients compare with non-JAC clients in regard to post-separation employment? 2. Which JAC services have the most impact on success in achieving employment? 3. Considering the additional costs of providing JAC services, are the added benefits derived from the program cost effective? 	
<p>Objectives: The objective of this project was to provide ACAP managers with data that reflect the value to the Army and to the civilian sector of the efforts of JAC staff members to prepare individuals to look for jobs outside of DoD. The data will permit ACAP to project program requirements and allocate appropriate resources to meet future needs.</p>	
<p>Status: Completed (September 14, 1993-May 31, 1995)</p>	
<p>Results: As part of an ACAP-sponsored outcome-based evaluation of JAC, approximately 3,000 servicemembers, Army civilians, and spouses of servicemembers who transitioned between October 1, 1992 and September 30, 1993 participated in Computer-Assisted Telephone Interviews (CATI) late in 1994. They were asked about transition and job search assistance received and post-separation employment and other, less tangible outcomes such as civilian job satisfaction and attitudes toward the military. The primary outcome measures were annual earnings, receipt of unemployment compensation, ratings of preparedness for the job market, civilian job ratings, and ratings of current financial condition relative to pre-separation.</p> <p>After controlling for individual and military demographics and background factors, participation in job search assistance services such as those offered through JAC was related to subsequent success in the civilian job market. As the number of and satisfaction with services increased, so too did preparedness for the job market, positive regard for the military as a career, earnings, and post-transition job ratings. Given the predilection to favor monetary benefits over less tangible, psychological effects, the finding that earnings increase as a function of the number of job assistance services received at a far greater rate than the cost of providing such services supports the continuance of such programs for exiting military members, their spouses, and Army civilians.</p>	
<p>Bibliography: Sadacca, R., Laurence, J.H., DiFazio, A.S., Rauch, H.J., & Hintze, D.W. (1995). <u>Evaluation of Job Assistance Centers in the Army Career and Alumni Program (ACAP)</u>. Alexandria, VA: Human Resources Research Organization. [Final Delivery Order Report]</p> <p>HumRRO (1993). <u>Final sampling plan</u>. Alexandria, VA: Human Resources Research Organization.</p>	
<p>Products: The Transition Assistance Survey.</p>	
<p>Planned Documents and Products:</p>	

DO# 0007	Title: Army Tests, Evaluations, and Experimentation with Army Combat Division Structure
Program Area QR <input checked="" type="checkbox"/> AOS _____ MT _____	DO-COR: Dr. T. Owen Jacobs DO-ACOR: Dr. Carlos K. Rigby Project Director: Mr. James H. Harris DO Summary
<p>Problem: The U.S. Army is in a period of transition unmatched by any other period in history. Military history records many examples of "build-up to meet threat/build-down when threat no longer exists." But nowhere is there any record of a transition period that had to deal with a geo-political situation in which the U.S. constituted the single, dominant global military force with known future requirements across a spectrum of possible conflicts, but with much higher focus on the lower end of the conflict spectrum. The Army's operations doctrine reflects the philosophies and procedures for fighting at the high end of the conventional portion of the war spectrum; however, that doctrine is being revised to reflect the expanded requirement to operate effectively in the new threat environment.</p> <p>Previous military doctrinal transitions have usually followed a cycle of: threat elimination, downsizing, emergence of new threat, emergence of new doctrine to meet that threat, and development of new military structures to execute the new doctrine in the new operational environment. These steps are not always sequential; when able to anticipate events, the Army can pursue some of these steps in parallel. That is the current case. Efforts toward developing new doctrine began nearly simultaneously with the first downsizing steps, and it seems probable that work toward developing new divisional structures will follow the publication of new operational doctrine, prior to completing downsizing. In that sense, the current downsizing presents an opportunity to restructure the force.</p> <p>Before presenting restructuring plans, however, a systematic compilation of previous restructuring test, evaluation, and experimentation literature needs to be made. Such a compilation, done systematically and interpreted in light of threats and operational doctrine then-existent, would appreciably aid in the anticipated restructuring work.</p>	
<p>Objectives: The objective of this research effort was to locate, collect, catalogue, and abstract the available test, evaluation, and experimentation literature in the arena of military restructuring.</p>	
<p>Status: Completed (September 15, 1993-June 15, 1994)</p>	
<p>Results: The scope of the initiatives to be considered was determined through interviews with experts on division design. The principal expert was Mr. Robert Keller of Combat Developments, Force Design Directorate, Combined Arms Center at Fort Leavenworth, KS. Based largely on his recommendations, the focus was set on post-Vietnam initiatives in general and the following in particular:</p> <ul style="list-style-type: none"> • Division Restructuring Study/Evaluation (DRS/DRE) • Army 86: Division 86 (Heavy) and Infantry Division (Light) • High Technology Light Division (HTLD) • Army of Excellence (AOE): Light Infantry Division (LID) and Heavy Division • Future Design: Trends and Recommendations <p>As documents were collected, the pertinence of the Triple Capabilities (TRICAP) study became apparent and it was added to the list.</p> <p>The initial sources of documents were searches of the Defense Technical Information Center (DTIC) and interviews of design experts. One of the major results of the interviews was a very useful history by Major Glen Hawkins. Most of the documents were ultimately collected from four sites: (1) the Force Design Directorate (FDD), (2) Office of the TRADOC Historian, (3) the Army Development and Employment Agency (ADEA), and (4) the Test and Experimentation Command (TEXCOM) Technical Library.</p> <p>During the planning phase of the project, one of the authors--General (Retired) Edwin H. Burba, Jr.--outlined insights on the characteristics that define Army organizations. These characteristics were used as a framework in selecting documents for inclusion. The characteristics, along with an example of applying the characteristics to current divisions, are included as an appendix to the final report. Two hundred documents were reviewed.</p> <p>All the references cited in the report, as well as the summaries prepared, are contained in a separate database system that identifies all references by using relevant subject area terms. A database system called "askSam Systems" was used to compile the bibliographic information.</p>	
<p>Bibliography: Ford, P., Burba, E.H., Jr., & Zugel, R.J. (1994). <u>Review of division structure initiatives</u>. HumRRO Final Report FR-PRD-94-15. Alexandria, VA: Human Resources Research Organization. (ARI Research Product 95-02, October 1994). [Final Delivery Order Report]</p>	
<p>Products:</p>	
<p>Planned Documents and Products:</p>	

DO# 0008	Title: 1991 Guard/Reserve Survey of Officers and Enlisted Personnel: File Weighting
Program Area QR _____ AOS <u> X </u> MT _____	DO-COR: Dr. Ronald B. Tiggie DO-ACOR: Ms. Dianne J. Murphy Project Director: Dr. Michael Wilson <div style="text-align: center;">DO Summary</div>
<p>Problem: Administration of the 1991 Guard/Reserve Survey of Officers and Enlisted Personnel has provided the Defense Manpower Data Center (DMDC) and the Office of the Assistant Secretary of Defense for Reserve Affairs (OASD(RA)) the only DoD-wide survey examining the attitudes and opinions of National Guard and Reserve component personnel regarding mobilization for Desert Shield/Storm. It is important that drawdown and Force restructuring planning personnel receive the results of this survey as these data provide insight into the effects of mobilization upon members and their families. Delivery of survey results is dependent upon the performance of survey adjustment weighting of survey responses. This project was structured to provide the accomplishment of appropriate survey weighting and the production of reports documenting the production and use of survey adjustment weights.</p>	
<p>Objectives: The objective of this project was to provide data and basic reports for policy planning by the full range of DoD offices concerned with military mobilization and its effect upon the families, as well as those concerned with related and general manpower policies.</p>	
<p>Status: Completed (September 22, 1993-April 3, 1995)</p>	
<p>Results: The primary deliverable from this project was a report summarizing the sampling methodology implemented for the 1991 Guard/Reserve Survey of Officers and Enlisted Personnel, the associated sampling issues, and proposed weighting adjustments to compensate for unequal sample selection probabilities among Reserve members. Activities documented in the report include the computation of sampling base weights, non-response adjustment of base weights, adjustment of survey totals to known population totals (raking), and production of replicate weights.</p>	
<p>Bibliography: Wilson, M.J., (1995). <u>1991 Guard/Reserve Survey of Officers and Enlisted Personnel: File Weighting</u>. Rockville, MD: Westat, Inc. [Final Delivery Order Report]</p>	
<p>Products:</p>	
<p>Planned Documents and Products:</p>	

DO# 0009	Title: Sampling Plan for the 1994 Health Care Survey of DoD Beneficiaries
Program Area OR _____ AOS <u> X </u> MT _____	DO-COR: Dr. Ronald B. Tiggie DO-ACOR: Dr. Tanya Guthrie Project Director: Dr. David Morganstein <p style="text-align: center;">DO Summary</p>
<p>Problem: The Department of Defense is mandated by Congress to conduct an annual survey to evaluate its health care services. The overall purpose of the survey is to measure satisfaction in the range of competing health care services, general health status, and use of health care. There is interest in overall measures of satisfaction across the populations of active duty service members, dependents of active duty service members, retirees, and survivors, as well as interest in measures within particular catchment areas which can be used by individual military hospitals for quality assessment.</p> <p>The sampling frame for the study was based on the Defense Enrollment Eligibility Reporting System (DEERS) file. The information in this complete and extensive frame can be used to generate highly efficient sampling designs. This file does change over time as the status of individuals changes and new persons enter in. Thus, this sample is a 'snapshot' of the population at one particular point in time.</p>	
<p>Objectives: The objective of this effort was to produce several sampling designs for the Survey of Beneficiaries study and to draft the supporting statement for the request for OMB approval of the data collection for dependents and survivors of retirees.</p>	
<p>Status: Completed (September 28, 1993-January 24, 1994)</p>	
<p>Results: The primary deliverables from the project were an analysis of alternative designs including EXCEL software which could be used to determine the most optimal sample design given a known set of inputs and desired design properties. Given a selected sampling plan with options chosen for a stratification system and a fully independent or partially dependent strata sampling plan, sample sizes were selected for the stratum. This was done using EXCEL spreadsheets. The spreadsheets provide base weights, which then need to be adjusted for nonresponse after the sample is collected.</p>	
<p>Bibliography: Chu, A. & Flores, I. (1994). <u>Sampling plan for the 1994 health care survey of DoD beneficiaries</u>. Rockville, MD: Westat, Inc. [Final Delivery Order Report]</p>	
<p>Products:</p>	
<p>Planned Documents and Products:</p>	

DO# 0010	Title: Economic and Occupational Analyses of 1992 DoD Reserve Surveys
Program Area OR _____ AOS <u> X </u> MT _____	DO-COR: Dr. Ronald B. Tiggie DO-ACOR: Dr. Mary Weltin Project Director: Dr. Michael Wilson <div style="text-align: center;">DO Summary</div>
<p>Problem: The 1992 Reserve Components DoD Survey of Officers and Enlisted Personnel and Their Spouses is part of a multi-year effort to collect important attitude and opinion data from men and women in each of the seven reserve components and all of their spouses. The results of this survey effort are used by the Office of the Secretary of Defense and each of the military services, including the Army Guard and Reserve, to formulate policies affecting the reserve force and their families. In addition to attitude and opinion data, this survey is an important and unique data source for civilian occupational information on the reservist. However, the data are provided on the survey in open-ended format and must be converted to the standard industry and occupational codes so they may be compared to other populations.</p>	
<p>Objectives: The objective of this delivery order is to provide data and basic reports for policy planning by the full range of DoD offices concerned with military families, as well as those staff agencies concerned with related and general manpower policies. To address this need, the contractor will conduct two primary tasks: (1) specialized coding of reservists' civilian labor experience, and (2) targeted analysis of the 1992 Reserve Component Surveys in several content areas.</p>	
<p>Status: Ongoing (September 28, 1993-September 30, 1995)</p>	
<p>Results:</p>	
<p>Bibliography:</p>	
<p>Products:</p>	
<p>Planned Documents and Products: Final Report. Delivery Order 0010, CLIN No. 0002AV [Final Delivery Order Report]</p>	

DO# 0011	Title: Methods for the Evaluation of C2 Systems
Program Area OR <u> X </u> AOS _____ MT _____	DO-COR: Dr. Sharon L. Riedel DO-ACOR: Mr. Robert S. Solick Project Director: Mr. Gene Jones
DO Summary	
<p>Problem: The challenges for successful wartime performance, and even the prevention of war, require careful examination of the human element in planning, decision making, and C2 systems. The ARI Fort Leavenworth Field Unit has been engaged in research on the behavioral aspects of corps through battalion-level C2 and is a key participant and contributor to the Battle Command Integration Program (BCIP). A primary role of ARI is to look at future C2 requirements, from the human perspective, by identifying and assessing better procedures, system capabilities, and training requirements. BCIP activities frequently seek research support on the behavioral aspects of C2 requirements, including development and assessment of user interface prototypes, requirements definition, and assessments of C2 system prototypes during development. In order to fulfill the requests to assess human performance in automated C2 systems, ARI is engaged in research to develop improved methods for assessment of C2 systems during development.</p>	
<p>Objectives: The objectives of this effort were to support the validation of methods for life cycle evaluation of knowledge-based C2 systems and to document the "lessons learned" from conducting evaluations of the AirLand Battle Management (ALBM) Advanced Technology Demonstration (ATD) prototype.</p>	
<p>Status: Completed (November 13, 1993-March 11, 1994)</p>	
<p>Results: The following are lessons learned during the conduct of knowledge base and interface evaluations of an expert system under development for the Army.</p> <p><u>Knowledge Base Evaluations.</u> The development of an expert system based decision aid required the design and creation of a large collection of facts, algorithms, rules, and interfaces into an entity referred to as the Knowledge Base. Completed over time by interviewing experienced personnel and researching available reference material, the developer produced prototype software. At the direction of the Battle Command Battle Laboratory, an independent systematic review of the Knowledge Base was conducted to validate the underlying rules in order to provide feedback to the developers. This process involved learning the system in great detail and then presenting the entire process to a new group of experts to insure that the design and the products of the aid were valid. The experts were exposed to a detailed presentation of the workings of the decision aid and were queried on their reactions to both the process and the product in deliberate evaluation sessions. As a result of these evaluations, significant feedback was generated and provided to the developer with positive recommendations to correct perceived deficiencies. The following issues were raised: (1) problems encountered in becoming experienced with the system; (2) the impact of software development and its current status on conducting evaluations; (3) the solicitation and use of subject matter experts; (4) the design and conduct of the Knowledge Base Evaluation; (5) presenting the findings of the evaluation; and (6) general comments.</p> <p><u>Soldier-Machine Interface (SMI).</u> An important part of expert system development is the design of the SMI. A poorly designed interface decreases productivity, increases errors, increases confusion and boredom, increases cost and development time, and may even lead to users' refusing to use the system at all. The following lessons were learned from the SMI assessment: (1) inadequate documentation made learning the system difficult; (2) software development and its current status made learning the system difficult; (3) interface problems were identified after the interface design was implemented; (4) human factors input was not integrated into system development, resulting in a system that was poorly designed; (5) the state of software development and lack of interface design standards affected the SMI assessment; and (6) the assessment results should be conveyed in a constructive manner to ensure that deficiencies are corrected.</p>	
<p>Bibliography: Flanagan, J.P. & Rappold, V. (1994). <u>Lessons learned from the knowledge based and soldier-machine interface evaluations.</u> Final Research Report. Falls Church, VA: CAE-Link Corporation. [Final Delivery Order Report]</p>	
<p>Products:</p>	
<p>Planned Documents and Products:</p>	

DO# 0012	Title: Improving Family Adaptation to the Stresses of Family Life
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. D. Bruce Bell DO-ACOR: Project Director: Dr. Dennis K. Orthner
DO Summary	
<p>Problem: Research on the ability of families to cope with the stresses of Army life has demonstrated that there are two types of adaptation: (1) adaptation to the marriage (called internal adaptation) and (2) family adaptation to Army events (called external adaptation). High internal adaption is characterized by soldiers (and their spouses) who say they are happily married, have good marital communication, and that the family is coping well. High external adaptation is characterized by soldiers (and their spouses) saying that they are satisfied with Army life, agree with Army values, and that they, as a couple, support making the Army a career. Analysis of data from both soldiers and their spouses show that these two dimensions exist. In fact, this same pattern had been found in male soldiers married to civilian females, female soldiers married to male civilians, and in dual military couples. The importance of these findings for the Army is that they can be used to guide the development and modification of family programs.</p> <p>Soldier ratings of internal adaptation are related to soldier ratings of work stress whereas soldier ratings of external adaptation is more related to soldier morale and willingness to remain in service. Research has shown that the most potent method of increasing external adaptation is by increasing the perceived level of support for families within the soldier's unit. Also, research has shown the Army already has some innovative family support programs functioning at the unit level which should have a positive impact upon not only family functioning, in general, but also the levels of family violence/abuse in particular. Research has also shown how proper marketing and service integration can improve all family services whether they are delivered at the unit level or within a family services center.</p> <p>The purpose of this effort was to see if a pilot program could be designed which would enable the Army Community Service (ACS) agency to focus more resources on external family adaptation through unit based programs. A second purpose was to gather the information necessary to test the effects of such unit based programs on family functioning, in general, and upon levels of family stress and social isolation which are associated with rates of family violence and abuse.</p>	
<p>Objectives: The effort had four objectives: (1) design a pilot program that can be used by ACS center personnel to increase the adaptation of families to the stresses of Army life; (2) teach the ACS professionals how to use it; (3) evaluate whether the program is being used; and (4) collect baseline data which can be used in a subsequent effort to test program effectiveness. An area of particular interest here was how these proposed changes would affect levels of family violence and neglect.</p>	
<p>Status: Completed (December 22, 1993-December 21, 1994)</p>	
<p>Results: Lessons learned about the ACS unit program from the pilot tests were as follows: (1) the role of the unit services coordinator (USC) needs to be clearly stated and discussed; (2) the ACS director and the USCs must be clear about what the unit program can and cannot do for the unit; (3) spending a great deal of time in the unit is not necessary; (4) there are management difficulties when trying to establish a mini-ACS out in the unit; (5) the unit program changes how Commanders think of ACS; and (6) soldiers and families have an increased awareness and understanding of ACS. Lessons learned about cross-training from the pilots included: (1) the unit program manual should be used to identify key cross-training points; (2) training on the USC role and its responsibilities needs to be done prior to cross-training; (3) ACS staff are often surprised about how much there is to know about the various programs; (4) being well-informed about ACS helps in gaining the confidence of the unit; (5) training and cross-training must be ongoing; and (6) some cross-training should also be given to ACS staff who are not in the USC roles. Lessons learned about unit orientation from the pilots: (1) talking Army language is key to building confidence in the units; (2) mission support means understanding their mission; (3) time spent in unit orientation is valued by ACS staff; and (4) ACS Directors often overestimate staff knowledge of the Army system. Lessons learned about team-building from the pilots: (1) teamwork is improved when time is set aside for USCs to share their experiences with one another; (2) teamwork helps reduce the stress of added job responsibilities; (3) an effective referral system requires teamwork; (4) failing to consider how problems will be solved as the Unit Program is established works against ACS staff morale; and (5) being informed about the unit and its mission is important for gaining unit confidence. Lessons learned about monitoring from the pilots included the findings that staff review of forms increases acceptance, forms should be kept simple, and referrals and unit services must be tracked. Key implementation lessons learned from the pilots: (1) involve all ACS staff in planning; (2) get senior leadership support; (3) take time to prepare; (4) know your units; (5) phase-in unit consultation; and (6) meet regularly to share experiences.</p>	
<p>Bibliography: Orthner, D.K., Bowen, G.L., Mancini, J.A., Pond, S.B., & Stawarski, C.A. (1994). <u>Army Community Service: ACS Unit Program Early Implementation Report</u>. [Final Delivery Order Report]</p>	
<p>Products: <u>Improving Family Adaptation to the Stresses of Army Life: Revised Program Training Manual.</u></p>	
<p>Planned Documents and Products:</p>	

DO# 0013	Title: Support for Review of Army Occupational Survey Program
Program Area QR <input checked="" type="checkbox"/> AOS <input type="checkbox"/> MT <input type="checkbox"/>	DO-COR: Dr. Michael G. Rumsey DO-ACOR: Project Director: LTG (R) John S. Crosby <div style="text-align: right;">DO Summary</div>
<p>Problem: The Army Occupational Survey Program (AOSP) "is a system of collection and computer-assisted processing, storage, retrieval, and analysis of detailed training and occupational information. This information is used for officer and enlisted specialties and military occupational specialties and is collected by administering questionnaires to specialty or MOS job incumbents and supervisors or subject matter experts throughout the world" (Army Regulation 611-3, p.1-1).</p> <p>"The AOSP is designed to support and evaluate Army programs in the following areas:</p> <ul style="list-style-type: none"> (1) classification (2) specialty or MOS development and modification (3) quality training requirements (4) assignment policies and use of personnel (5) evaluation tests or systems (6) personnel retention" (Army Regulation 611-3, p.1-1). 	
<p>Objectives: The objective of this work was to provide ARI with information and suggestions that it could use as a basis for developing recommendations regarding the most appropriate organization, missions, and functions of the AOSP.</p>	
<p>Status: Completed (January 7, 1994-July 6, 1994)</p>	
<p>Results: Information was collected primarily from interviews with over fifty senior AOSP-related leaders, users, program managers, and administrators. Five options were evaluated: (1) eliminate the AOSP, (2) retain the AOSP, improving its management and execution using technology, (3) retain the AOSP, downsizing the current organization and contracting out some functions, (4) reorganize and resource program to meet needs of all Personnel Life Cycle functional areas, and (5) move toward a joint program with the Air Force. Based on the information collected, it was concluded that the products of AOSP have great potential utility, beginning with the training function, where most of the current program effort is focused. To realize the full potential of the program, however, will require a radical change to the current program and innovative use of technology to enhance program delivery and utilization of results.</p>	
<p>Bibliography: Crosby, J.S., & Faber, M.R. (1994). <u>Review of the Army Occupational Survey Program</u>. [Final Delivery Order Report]</p>	
<p>Products:</p>	
<p>Planned Documents and Products:</p>	

DO# 0014	Title: FY 1993 Population Representation in the Military Services Report (POPREP93)
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Ronald B. Tiggie DO-ACOR: Major Dana Lindsley Project Director: Ms. Monica Gribben <p style="text-align: center;">DO Summary</p>
<p>Problem: Each year, the Office of the Assistant Secretary of Defense (Personnel & Readiness) [OASD/P&R] publishes a congressionally-mandated report, <u>Population Representation in the Military Services (POPREP)</u>. The <u>POPREP</u> provides detailed data on enlisted and officer recruiting and retention. These data include demographic, educational, aptitude, and socioeconomic characteristics of applicants, new recruits, and enlisted and officer members of the Active and Reserve Components.</p> <p>The <u>POPREP</u> is distributed to a diverse audience within the Department of Defense and the Executive and Legislative branches (including members of the Congress, high-level DoD policymakers, the Services, and the military manpower community) as well as military manpower researchers. Prominent uses of the data are: A source of information to members/committees of Congress; a foundation for addressing congressional committee actions; a basis for budget/legislative changes; a resource for Service research communities and the general public; and an element for military readiness estimates.</p> <p>The intended audiences need the report to locate specific population representation information such as marital status by Service, by gender, and by age. Readers also use the report to find clearly stated analyses of military manpower and personnel issues with supporting data as documentation of the analyses.</p>	
<p>Objectives: The objectives of this effort were to (1) assist in meeting the requirements for collecting, analyzing, and presenting information on characteristics of the enlisted and officer forces; and (2) develop, produce, and distribute the FY 1993 report on <u>Population Representation in the Military Services</u>.</p>	
<p>Status: Completed (February 25, 1994-January 31, 1995)</p>	
<p>Results: The primary deliverable from the project was a complete analysis of FY 1993 POPREP data, including Active enlisted applicants, accessions, and members; Active officer accessions and officer corps; Reserve enlisted accessions and members; and Reserve officer accessions and officer corps. To provide analyses of trends in the military and comparable civilian populations, the report contains longitudinal data for selected demographic variables.</p>	
<p>Bibliography: <u>Population Representation in the Military Services. Fiscal Year 1993</u> (November 1994). Washington DC: Office of the Assistant Secretary of Defense (Force Management Policy). [Final Delivery Order Report]</p>	
<p>Products:</p>	
<p>Planned Documents and Products:</p>	

DO# 0015	Title: Revision of the Army Career Transition Survey (ACTS)
Program Area QR _____ AOS <u> X </u> MT _____	DO-COR: Dr. Ronald B. Tiggie DO-ACOR: Project Director: Dr. Janice Laurence <div style="text-align: right;">DO Summary</div>
<p>Problem: ARI developed an exit survey instrument, the Army Career Transitions Survey (ACTS), which is designed to be administered to soldiers who are separating from the Army. In a recent evaluation of the ACTS, Giacalone¹ (1993) raised a number of concerns about the content of the ACTS and the procedures currently being used to administer the survey. Questions about the usefulness to sponsoring organizations within the Army of the data collected were also raised by Giacalone as were issues concerning the representativeness of the survey respondents.</p> <p>The Office of the Deputy Chief of Staff of Personnel (ODCSPER, HRD) subsequently asked ARI to revise the ACTS to insure that it addresses the specific areas of interest to Army planners and policy makers. To accomplish this task, the appropriate Army Commands will be interviewed to identify the topics of interests, the items on the current version will be reviewed and revised, and standardized administrative procedures will be developed for all administration sites.</p>	
<p>Objectives: The objective of this project is to provide the Army with a revised exit survey that contains items that address the most important issues of interest to the Army. In addition, to help insure data consistency, completeness, and usefulness, administration procedures for ACTS will be revised.</p> <p>This effort is designed to provide retention planners with better information about the reasons that made soldiers think about leaving the Army, and will provide improvements in the methods of monitoring trends and cycles. It will provide recruiting and marketing planners with enhanced indicators of the advice returning veterans are giving the Army's youth market.</p>	
Status: Ongoing (April 6, 1994-August 24, 1995)	
Results:	
Bibliography: Giacalone, R.A. (1995). <u>Revision of the Leadership Supplement to the Army Career Transitions Survey (ACTS)</u>	
Products:	
Planned Documents and Products: Final Study Report. Delivery Order 0015, CLIN No. 0002AN. [Final Delivery Order Report]	

¹ Giacalone, Robert A. (1993). A critical evaluation of the Army career transitions survey: A suggested approach for reformulation. Alexandria, VA: U.S. Army Research Institute.

DO# 0016	Title: Update of U.S. Army Research Institute's Officer and Enlisted Personnel Research Data Bases for 1993 and 1994
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Peter M. Greenston DO-ACOR: Project Director: Ms. Lori Ramsey <div style="text-align: right;">DO Summary</div>
<p>Problem: ARI requires periodic updates to a group of data bases that are used to perform policy and behavioral research and analyses of manpower and personnel issues. These data bases are constructed primarily of annual personnel and training data maintained by various offices within the U.S. Army and the Defense Manpower Data Center (DMDC). In order to satisfy these research requirements, it is necessary to add current data to the Officer Administrative Data Base (OADB), the Officer Longitudinal Research Data Base (OLRDB), the Officer Standardized Educational Testing Data Base (OSETDB), and the Enlisted Panel Research Data Base (EPRDB).</p>	
<p>Objectives: The objective of this effort was to collect source data files and to update the OADB, the OLRDB, the OSETB, and the EPRDB. The procedures used conform to those described in the existing data base documentation.</p>	
<p>Status: Completed (April 8, 1994-June 6, 1995)</p>	
<p>Results: The primary deliverables for this project were the 1993-1994 officer and enlisted data bases containing career history data on U.S. Army personnel. The data bases were created in Statistical Analysis System (SAS) and flat file formats. Officer Master File (OMF), Separation Officer Master File (SOMF), and Voluntary Separation Incentive Special Separation Benefit (VSI/SSB) data for 1993 and 1994 were incorporated into the Officer Longitudinal Research Data Base (OLRDB) and into the Officer Administrative Data Base (OADB); OLRDB Core data were added to the Officer Standardized Educational Testing Data Base (OSETDB); and enlisted master/loss accession, composite, Enlisted Master File (EMF), and VSI/SSB data were included in the Enlisted Panel Research Data Base (EPRDB).</p>	
<p>Bibliography: Ramsay, L.J., & Fertig, K.L. (1995). <u>Update of the U.S. Army Research Institute's Officer Research Data Bases for 1993 and 1994</u>. Study Report 94-9. Arlington, VA: Fu Associates, Ltd. [Final Delivery Order Report] Ramsay, L.J., & Fertig, K.L. (1995). <u>Update of the U.S. Army Research Institute's Enlisted Panel Research Data Base for 1993 and 1994</u>. Study Report 94-9. Arlington, VA: Fu Associates, Ltd. [Final Delivery Order Report]</p>	
<p>Products:</p>	
<p>Planned Documents and Products:</p>	

DO# 0017	Title: Preparing a Book on Computerized Adaptive Testing Version of the Armed Services Vocational Aptitude Test Battery (CAT-ASVAB)
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Ronald B. Tiggie DO-ACOR: Dr. Jane Arabian Project Director: Dr. James R. McBride <div style="text-align: right;">DO Summary</div>
Problem: The Department of Defense undertook a limited implementation of CAT-ASVAB in 1993, and the decision has been made to implement it in all of the Military Entrance Processing Stations nationwide. This implementation of computerized adaptive testing (CAT) is the culmination of a long-range research and development program. The lessons learned in the course of that research program would be invaluable to other organizations, military and civilian alike, that contemplate the use of computerized testing. However, no consolidated documentation of the CAT-ASVAB R&D program exists.	
Objectives: The purpose of this effort is to: (1) coordinate preparation of a document that brings together important results from the CAT-ASVAB research and development program in a single volume; (2) edit chapters of the document that are to be contributed by DoD civilian researchers and policymakers; and (3) prepare and edit those chapters of the document that are best contributed by individual researchers from the private sector. The overall objective of this effort will be to produce a camera-ready version of a book on the CAT-ASVAB research and development program, for publication.	
Status: Ongoing (April 18, 1994-July 19, 1995)	
Results:	
Bibliography:	
Products:	
Planned Documents and Products: Final Camera-Ready Book. Delivery Order 0017, CLIN No. 0002AJ. [Final Delivery order Report]	

DO# 0018	Title: Exploring Human Dimensions of Battle Command
Program Area OR <u> X </u> AOS _____ MT _____	DO-COR: Dr. Stanley M. Halpin DO-ACOR: Project Director: Dr. Joan Markessini
DO Summary	
<p>Problem: The Army and the TRADOC Battle Command Battle Laboratory (BCBL) wanted to sponsor a workshop on the human dimension of battle command. It was to include participants from not only TRADOC, but also from the Army War College (AWC) and the United States Military Academy (USMA). The workshop was to address the range of U.S. Army training and education in the area of battle command. The workshop was also to consider the implications of battle command for research and research planning.</p>	
<p>Objectives: The principal purpose of this project was to assist ARI, BCBL, and TRADOC in formulating the implications of battle command for training and education, research, and research planning.</p>	
<p>Status: Completed (May 3, 1994-December 30, 1994)</p>	
<p>Results: A workshop conference was conducted and the results were forwarded to TRADOC, the Army War College, and West Point for comments. The results were summarized in a report of the conference proceedings and a series of four position papers.</p>	
<p>Bibliography: Halpin, S.M. (Editor) (1994). <u>Force XXI Battle Command Conference: Proceedings</u>. Falls Church, VA: CAE-Link. [Final Delivery order Report]</p>	
<p>Products: Four position papers:</p> <ol style="list-style-type: none"> 1. A comprehensive model for military leadership 2. Cognitive issues for battle command 3. Development for battle command: Developmental approaches and instructional interventions 4. Cognitive capabilities for battle command: Developmental approaches and instructional interventions 	
<p>Planned Documents and Products:</p>	

DO# 0019	Title: Promotion and Professional Development in a Smaller, CONUS-based Army (Phase 1)
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Abraham Nelson DO-ACOR: LTC John Swenson Project Director: Dr. D. A. Harris <div style="text-align: right;">DO Summary</div>
<p>Problem: The Army is in a period of transition unmatched by any other period in history. Military history records many examples of "build-up to meet threat/build-down when threat no longer exists." The particular concern of this study is the viability of the enlisted promotion and professional development systems in the smaller, CONUS-based Army of the 1990's. These two systems are supported by PCS (permanent change of station) operations and policy. The movement to a smaller, CONUS-based Army will reduce PCS moves. This reduction in PCS may adversely affect both professional development and promotion opportunities.</p>	
<p>Objectives: This was Phase 1 of a two phase study effort. The objectives of this study effort were to: (1) discern the impact of a smaller, primarily CONUS-based force on professional development (PD) and promotion opportunities, (2) document policy changes required to sustain PD and promotion opportunities at current rates, and (3) evaluate the effectiveness and efficiency of current promotion and professional development systems.</p>	
<p>Status: Completed (May 13, 1994-January 12, 1995)</p>	
<p>Results: A model was developed to study the impact of the European drawdown on PCS moves. The model operationalized the mathematical structure defined in the Interim Study Report entitled "A Mathematical Model for Analyzing the Effect of Changes in the Authorized Position Structure on Army Personnel Policies." The model will be used to complete the analyses in Phase 2 of this project.</p>	
<p>Bibliography: Professional Development in a Smaller, Conus-Based Army (Phase I). Human Resources Research Organization (HumRRO). [Final Delivery Order Report]</p>	
<p>Products: iThink Alternative PCS Rotation Model</p>	
<p>Planned Documents and Products:</p>	

DO# 0020	Title: Development of Measures for Sinai Peacekeeping
Program Area QR _____ AOS _____ MT <u> X </u>	DO-COR: Dr. Michael G. Rumsey DO-ACOR: Dr. Dale Palmer Project Director: Dr. Douglas H. Reynolds <div style="text-align: right;">DO Summary</div>
Problem: The purpose of this effort is to develop peacekeeping performance measures as part of a larger program to select candidates for peacekeeping operations. Behaviorally-based rating scales and job knowledge tests are to be developed to be used as performance criteria against which to validate selection measures currently being developed at ARI.	
Objectives: The objective of this work is to develop measures of individual peacekeeping performance in the Sinai.	
Status: Ongoing (May 26, 1994-September 25, 1995)	
Results:	
Bibliography:	
Products:	
Planned Documents and Products: Final Study Report. Delivery Order 0020, CLIN No. 0002AD. [Final Delivery Order Report]	

DO# 0021	Title: Longitudinal Research on Officer Careers (LROC)
Program Area QR _____ AOS <u> X </u> MT _____	DO-COR: Dr. Guy Siebold DO-ACOR: Project Director: Dr. Rodney A. McCloy <div style="text-align: right;">DO Summary</div>
Problem: The purpose of this effort is to address long-term and related short-term longitudinal research on officer careers via the LROC data base. Relevant issues will be identified through interviews with leaders in the personnel and leader development community. At least one of the long-term and related short-term issues will be addressed through analysis, and the potential for the LROC data base will be demonstrated through sample analyses.	
Objectives: The objectives of this work are to (1) demonstrate the usefulness of the LROC data base, (2) identify long-term and related short-term longitudinal research issues, and (3) specify the design and structure of future research related to the issues raised by the personnel and leader development community.	
Status: Ongoing (June 28, 1994-July 31, 1995)	
Results:	
Bibliography:	
Products:	
Planned Documents and Products: Final Technical Report. Delivery Order 0021, CLIN No. 0002AF. [Final Delivery Order Report]	

DO# 0022	Title: Impact of Battalion Peacekeeping Requirements on the Sponsoring Army National Guard Division
Program Area QR _____ AOS _____ MT <u> X </u>	DO-COR: Dr. Joseph Hagman DO-ACOR: Project Director: Mr. Gene Jones <div style="text-align: right;">DO Summary</div>
<p>Problem: The ARI Field Unit at Boise, Idaho, is currently engaged in research on the personnel, training, and family support issues affecting the deployment of a battalion-sized unit composed of both Active Component (AC) and Reserve Component (RC) units for a peacekeeping mission in the Sinai desert. Historically, this battalion has been drawn from the 82nd and 101st Airborne Divisions. However, now the battalion will consist of 400 volunteers from the 29th Infantry Division (ID) (Light), Army National Guard (ARNG), 113 AC soldiers, and 41 U.S. Army Reserve (USAR) soldiers (primarily Individual Ready Reserve (IRR) volunteers from around the nation).</p>	
<p>Objectives: The objectives of this effort are to identify and document the personnel and training impact of peacekeeping battalion requirements on the ARNG's 29th ID during and after its period of peacekeeping mission sponsorship.</p>	
<p>Status: Ongoing (June 28, 1994-June 27, 1996)</p>	
<p>Results:</p>	
<p>Bibliography:</p>	
<p>Products:</p>	
<p>Planned Documents and Products: Final Report. Delivery Order 0022, CLIN No. 0002AG. [Final Delivery Order Report]</p>	

DO# 0023	Title: Identifying the Attrition Problem and Its Solutions
Program Area QR <input checked="" type="checkbox"/> X AOS _____ MT _____	DO-COR: Dr. Clint Walker DO-ACOR: Project Director: Dr. Janice Laurence <div style="text-align: right;">DO Summary</div>
Problem: After decades of research on the "attrition problem" and numerous ad hoc remedies, Army management still experiences problems with attrition. It has also been evident that some attrition has a positive impact on the Army. Thus there exists the need to generate a generally accepted conceptualization of the "attrition problem" and a coordinated set of remedies that could be responsive to changes in the external environment.	
Objectives: The objective of this effort was to prepare a report critically reviewing the literature on the subject of enlisted attrition from the Army. The review was intended to identify, insofar as possible, what the "attrition problem" is and what information is lacking to identify the nature and extent of the problem.	
Status: Completed (July 29, 1994-November 28, 1994)	
Results: The literature review suggested that the best bets toward solving the attrition problem are to (a) determine the extent of management/policy control at various levels and set guidelines that are appropriate; and (b) enhance the match between the individual and the organization through classification based on biodata/temperament as well as realistic previews of the job, the environment, and the behavior. Finally, concern over attrition by outside parties (e.g., Congress) is not likely to subside. The Army would be in a better position to answer continuing concerns if the causes and codes were tracked by personal characteristics and their interactions were understood. The Army could then account for and explain attrition levels and tradeoffs between attrition and other personnel policies.	
Bibliography: Laurence, J.H., Naughton, J.A., & Harris, D.A. (1995). <u>Attrition Revisited: Identifying the Problem and Its Solutions</u> . Alexandria, VA: Human Resources Research Organization. [Final Delivery Order Report]	
Products:	
Planned Documents and Products:	

DO# 0024	Title: Modeling the Enlistment Decision with Army Communication Objectives Measurement Systems Data
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Paul Gade DO-ACOR: Project Director: Dr. Veronica Nieva <div style="text-align: right;">DO Summary</div>
<p>Problem: Within the context of today's downsizing military, interest in the recruiting market remains high. Over two hundred thousand incoming recruits are still needed to fulfill the military's annual active duty mission. Recently there has been concern that the pool of young people interested in joining the military may be shrinking. Anecdotal reports from recruiters indicate increasing difficulty in meeting mission. Annual surveys and recent studies have shown that the level of enlistment propensity among 16 to 24 year old youth has been declining steadily over the past few years. This study was one of several efforts undertaken to attempt to obtain a better understanding of the forces that affect enlistment propensity.</p>	
<p>Objectives: The objective of this project was to develop several empirically derived models of enlistment interest and actual behavior using data from a survey conducted in 1987 of a nationally representative sample of young men and their parents called the "Army Communications Objectives Measurement System (ACOMS)." The utility of the Fishbein and Ajzen theories of reasoned action within the context of military recruiting as proposed in the original ACOMS project was also tested.</p>	
<p>Status: Completed (July 29, 1994-June 30, 1995)</p>	
<p>Results: Four empirical models were developed on Army and military enlistment: a youth model of Army enlistment, a linked youth and parent model of Army enlistment, a youth model of military enlistment, and a combined youth and parent model of military enlistment. The models were developed in several stages, starting from a conceptual model that applied the Fishbein and Ajzen concepts to enlistment intentions and behaviors, through an exploratory analysis of the variables available in the ACOMS survey instrument, to a model building effort that employed structural covariance modeling techniques. In general, these models provide strong support for the general framework presented by the theory of reasoned action and for the survey measures that had been developed for ACOMS to measure variables suggested by the theory, that is, youth attitudes are strongly predictive of youth enlistment intentions and behaviors. Additional findings were (a) strong support for the role of social influence, in particular parental influence, in the enlistment process, and (b) strong predictive relationships between measures of enlistment intentions and actual enlistment behaviors.</p>	
<p>Bibliography: Nieva, V.F., Wilson, M.J., Norris, D.G., Greenlees, J.B., Laurence, J.H., & McCloy, R.A. (1995). <u>Modeling the enlistment decision with Army Communications Objectives Measurement Systems (ACOMS) data</u>. Alexandria, VA: Human Resources Research Organization. [Final Delivery Order Report]</p>	
<p>Products:</p>	
<p>Planned Documents and Products:</p>	

DO# 0025	Title: Research Findings on Soldier Selection and Their Implications for Army Policy and Programs
Program Area QR <input checked="" type="checkbox"/> AOS <input type="checkbox"/> MT <input type="checkbox"/>	DO-COR: Dr. Clint Walker DO-ACOR: Dr. Michael G. Rumsey Project Director: Dr. Deirdre Knapp <p style="text-align: center;">DO Summary</p>
Problem: Considerable research on the selection and classification of enlisted personnel has been conducted and documented in numerous technical reports. A continuing problem for ARI researchers is to assure that relevant research findings are communicated to non-technical Army audiences.	
Objectives: The objective of this effort is to develop a report that reviews what research discloses about soldier selection and classification that can be used by Army leaders, program managers, and policy makers to address Army needs.	
Status: Ongoing (July 29, 1994-June 30, 1995)	
Results:	
Bibliography:	
Products:	
Planned Documents and Products: Final Report. CLIN. No. 0002AE. [Final Delivery Order Report]	

DO# 0026	Title: Intercultural Communication Analysis for Special Forces
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Judith Brooks DO-ACOR: Project Director: Dr. Teresa Russell <div style="text-align: right;">DO Summary</div>
Problem: The Army Research Institute was asked by the U.S. Army John F. Kennedy Special Warfare Center and School to define the critical performance dimensions of intercultural communication for Special Forces personnel and identify appropriate topics for training.	
Objectives: The objectives of this effort were to define intercultural communication and its important dimensions for Special Forces and link those dimensions to appropriate training topics that need to be addressed, noting gaps in current Special Forces intercultural training programs.	
Status: Completed (September 28, 1994-December 31, 1994)	
Results: The project was conducted in three stages: (1) identifying intercultural communication training topics in the published literature, (2) defining intercultural communication in terms of attributes and performance categories, and (3) tying the performance categories to the content of U.S. Army John F. Kennedy Special Warfare Center and School training courses. A critical incident sorting procedure resulted in a set of eight intercultural communication categories for Special Forces. The eight categories were mapped against training in terms of the level of skill provided. This mapping showed that very few of the current training courses build intercultural communication skills. Once individuals finish their training rotations, they join teams and develop skills as they apply awareness and knowledge gained in training. Training would need to incorporate more hands-on type exercises to further intercultural communication skills training.	
Bibliography: Russell, T.R., Crafts, J.L., & Brooks, J.E. (1994). <u>A Review of Intercultural Communication Requirements for Special Forces Teams</u> (HumRRO FR-PRD-94-27). Alexandria, VA: Human Resources Research Organization. [Final Delivery Order Report]	
Products:	
Planned Documents and Products:	

DO# 0027	Title: Phase 2: Promotion and Professional Development in a Smaller, CONUS-Based Army
Program Area QR <u> X </u> AOS <u> </u> MT <u> </u>	DO-COR: Dr. Abraham Nelson DO-ACOR: LTC John Swenson Project Director: Dr. D. A. Harris <p style="text-align: center;">DO Summary</p>
<p>Problem: The US Army is in a period of transition unmatched by any other period in history. The particular concern of this study is the viability of the enlisted promotion and professional development systems in the smaller, CONUS-based Army of the 1990's. These two systems are supported by PCS (permanent change of station) operations and policy. The new Army will require fewer PCS moves. This reduction in PCS may adversely affect both professional development and promotion opportunities.</p>	
<p>Objectives: This is Phase 2 of a multi-phase effort. The objectives of this effort are to (1) discern the impact of a smaller, CONUS-based force on professional development (PD) and promotion opportunities, (2) document policy changes required to sustain PD and promotion opportunities at current rates, and (3) evaluate the effectiveness and efficiency of current promotion and professional development systems.</p>	
<p>Status: Ongoing (December 21, 1994-July 19, 1995)</p>	
<p>Results:</p>	
<p>Bibliography:</p>	
<p>Products:</p>	
<p>Planned Documents and Products: Final Study Report. Delivery Order 0027, CLIN No. 0002AU.</p>	

DO# 0028	Title: Soldier Selection Database Maintenance
Program Area QR <input checked="" type="checkbox"/> AOS _____ MT _____	DO-COR: Ms. Frances Grafton DO-ACOR: Project Director: Dr. Rodney McCloy/Dr. Scott Oppler <div style="text-align: right;">DO Summary</div>
Problem: Two Memoranda of Agreement between the Director of Military Personnel Management, Deputy Chief of Staff for Personnel and ARI (1985, 1992) outlined the requirement for a research and development effort leading to improvements in the Army's enlisted personnel selection and classification system. This effort was executed primarily through two research efforts, Project A and Building the Career Force. The databases created in these two projects are unique for their coverage of soldier performance and aptitudes, and are needed continuously to address a variety of manpower and personnel issues.	
Objectives: The purpose of this effort is to maintain the Project A and Building the Career Force databases so that critical manpower and personnel research questions can be addressed.	
Status: Ongoing (January 5, 1995-November 30, 1995).	
Results:	
Bibliography:	
Products:	
Planned Documents and Products: Final Report. Delivery Order 0028, CLIN No. 0002AE. [Final Delivery Order Report]	

DO# 0029	Title: FY 1994 Population Representation in the Military Services Report (POPREP94)
Program Area QR <input checked="" type="checkbox"/> AOS _____ MT _____	DO-COR: Dr. Ron Tiggie DO-ACOR: Major Dana Lindsley Project Director: Ms. Monica Gribben <div style="text-align: right;">DO Summary</div>
<p>Problem: Each year, the Office of the Assistant Secretary of Defense (Personnel & Readiness) [OASD/P&R] publishes a congressionally-mandated report, <u>Population Representation in the Military Services (POPREP)</u>. The <u>POPREP</u> provides detailed data on enlisted and officer recruiting and retention. These data include demographic, educational, aptitude, and socioeconomic characteristics of applicants, new recruits, and enlisted and officer members of the Active and Reserve Components.</p> <p>The <u>POPREP</u> is distributed to a diverse audience within the Department of Defense and the Executive and Legislative branches (including members of the Congress, high-level DoD policymakers, the Services, and the military manpower community) as well as military manpower researchers. Prominent uses of the data are: A source of information to members/committees of Congress; a foundation for addressing congressional committee actions; a basis for budget/legislative changes; a resource for Service research communities and the general public; and, an element for military readiness estimates.</p> <p>The intended audiences need the report to locate specific population representation information such as marital status by Service, by gender, and by age. Readers also use the report to find clearly stated analyses of military manpower and personnel issues with supporting data as documentation of the analyses.</p>	
<p>Objectives: The objectives of this effort are to (1) assist in meeting the requirements for collecting, analyzing, and presenting information on characteristics of the enlisted and officer forces; and (2) develop, produce, and distribute the FY 1994 report on <u>Population Representation in the Military Services</u>.</p>	
<p>Status: Ongoing (March 3, 1995-December 2, 1995)</p>	
<p>Results:</p>	
<p>Bibliography:</p>	
<p>Products:</p>	
<p>Planned Documents and Products: Final Report. Delivery Order 0029, CLIN No. 0002AG. [Final Delivery Order Report]</p>	

DO# 0030	Title: Selection and Assessment Support for Special Operations Forces: Phase I
Program Area QR _____ AOS _____ MT <u> X </u>	DO-COR: Dr. Michael G. Sanders DO-ACOR: Project Director: Dr. Deirdre Knapp/Mr. Adrian Lussier <div style="text-align: right;">DO Summary</div>
Problem: This project was undertaken at the request of the Selection and Assessment Commander of the Special Operations Forces. It will address concerns about which recruiting and selection techniques should be used to create the most efficient and effective programs.	
Objectives: The objective of this effort is to collect and analyze data on the effectiveness of existing recruiting, selection, and training techniques. The effort will establish the basis for empirically derived recommendations for future programs.	
Status: Ongoing (February 15, 1995-November 30, 1995)	
Results:	
Bibliography:	
Products:	
Planned Documents and Products: Final Report. Delivery Order 0030, CLIN No. 0002AE. [Final Delivery Order Report]	

DO# 0031	Title: Technology Review of the Use of Continuous Speech Recognition for Language Training
Program Area OR <input checked="" type="checkbox"/> AOS _____ MT _____	DO-COR: Dr. Robert Seidel DO-ACOR: Project Director: Dr. Mazie Knerr <div style="text-align: right;">DO Summary</div>
Problem: The Special Operations Command has a requirement to (a) enhance the foreign language training of assigned military personnel, (b) maintain foreign language proficiency of personnel, and (c) provide a capability for rapid familiarization of a specific foreign language before deployment.	
Objectives: The objective of this project is to conduct a technology review that will identify, demonstrate, and explain promising technologies that will lead to the creation of improved foreign language tutors. This review will include a series of round-table discussions in which the practical problems of such technologies will be discussed. The technologies emphasized in this review will be continuous speech recognition machine translation.	
Status: Ongoing (May 12, 1995-November 12, 1995)	
Results:	
Bibliography:	
Products:	
Planned Documents and Products: Final Report. Delivery Order 0031, CLIN No. 0002. [Final Delivery Order Report]	

DO# 0032	Title: Modeling the Individual Enlistment Decision
Program Area QR _____ AOS _____ MT <u> X </u>	DO-COR: Dr. Peter Legree DO-ACOR: Project Director: Dr. D. A. Harris <div style="text-align: right;">DO Summary</div>
<p>Problem: The Office of the Deputy Chief of Staff for Personnel asked the U.S. Army Research Institute (ARI) to identify and evaluate factors influencing the enlistment decision and the propensity to serve in the military. Existing data bases have been primarily developed for other reasons (e.g., to track population trends) and are of limited use in developing a general model of factors influencing the enlistment decision or the propensity for military service. Additional data are required to address and quantify the role of factors that may influence the decision to join the military.</p>	
<p>Objectives: This is Phase I of a three phase effort. The primary objectives of this effort are to develop alternative models of the enlistment decision and to identify, construct, and pilot measures of enlistment propensity and factors that influence the decision process.</p>	
<p>Status: Ongoing (May 18, 1995-May 18, 1996)</p>	
<p>Results:</p>	
<p>Bibliography:</p>	
<p>Products:</p>	
<p>Planned Documents and Products: Final Study Report. Delivery Order 0032, CLIN No. 0002AD. [Final Delivery Order Report]</p>	

Appendix
ARI COMPRS Program Descriptions

Quick Reaction (QR) Program

Applicable Areas. The QR program is intended to give ARI a quick-response capability to perform short-term research or studies and analysis dealing with manpower and personnel issues for which the necessary in-house capability is not available. The QR Program may only be used for the procurement of non-personal services to perform the tasks specified in the DO, subject to the limitations set forth below.

Conditions. Because this program is intended to resolve manpower and personnel issues that can be studied in a short time, the following conditions will normally apply:

- Each of the QR Program DOs shall be completed within the period of time specified in the DO, with the maximum allowable completion normally being within a 12-month period from the date of the DO.
- Each task of the DO shall be completed by HumRRO or its subcontractor within the total time allocated and a final report prepared and delivered.
- Unless otherwise stated in the DO, the tasks to be performed by the Contractor shall include a meeting with ARI at Alexandria, Virginia or at an ARI Field Unit at the start of, and at the completion of, each of the QR Program DOs.

Attitude and Opinion Survey (AOS) Program

Applicable Areas. The AOS program is intended to give ARI the ability to conduct surveys to provide information for accession and force management decision-making. This information can only be obtained through surveys of the target populations and may require updating due to changing population dynamics and attitudes in the various population segments.

Conditions. Because this program is intended to provide information quickly to resolve manpower and personnel issues, the following conditions shall normally apply:

- Each of the AOS efforts shall be completed within the period of time specified in the DO, with the maximum allowable completion normally being within a 12-month period of the date of the DO or an 18-month period if Office of Management and Budget (OMB) approval is required. Each AOS survey shall be performed using standard random sampling procedures or other appropriate sampling techniques.
- The tasks written by the Government in each AOS Program SOT shall include a statement of the target group for the survey. A target group may be defined as, for example, all males, age 16-21 years old, in high school or graduated, and having positive propensity to enlist in any military service. The Contractor shall prepare as part of its response to the SOT, the necessary screening and sampling methodologies to assure that the target group requirements are met.

- If specified in the SOT and subsequent DO, the Contractor shall prepare a survey instrument. The Government may, at its discretion, construct a proposed survey instrument and submit it to the Contractor for review and recommended changes. The approved survey instrument shall be administered by the Contractor to the target population, or a sample thereof. All reproduction, survey administration, analysis, and report generation costs shall be included in the Contractor's RFDO for an AOS survey.

- The ability to conduct surveys under the AOS program may depend on ARI obtaining OMB approval to collect the information from the public. If OMB approval is required, and if such approval is not obtained, the survey shall not be conducted. The Contractor will be notified by the Government of the status of OMB approval. Surveys involving military personnel do not require OMB approval. ARI will make the determination of approval authority prior to an SOT being issued and will clearly state in the SOT if survey administration is contingent upon any other approval authority.

- When the final survey instrument is received by the Government, it may be necessary for the DO COR to submit the survey instrument to OMB for approval. The approval process may require from four to six months. Part of the OMB submission is a detailed description of the sampling plan, including burden hours, sampling methodology, non-response analysis, etc. The Contractor shall prepare the necessary documentation in accordance with the SOT and DO requirements and submit it to the DO COR who will submit it through agency channels.

- Each DO task shall be completed by the Contractor within the time allocated and a final report delivered. The final report shall contain copies of any appropriate verbatim responses of survey participants. Unless otherwise stated in the DO, the tasks to be performed by the Contractor shall include a meeting with ARI in Alexandria, Virginia or other ARI Field Unit locations at the start of, and at the completion of, each AOS DO.

- At all times the contractor will protect the confidentiality of the survey responses.

- If OMB approval is not received, the Contractor will be paid only for those tasks in the DO which are completed, and which do not require an approved survey instrument. Each AOS DO will usually contain at least two phases as follows:

Phase I. Preparation. The tasks under Phase I will be the review or development of survey instruments, sampling methodology, preparation of approval packet (if required in the DO), and other items necessary for preparation of the survey administration.

Phase II. Survey Administration, Analyses, and Reporting. Upon receipt of survey approval, Phase II will involve the tasks necessary to conduct the survey, compile and analyze the data, prepare reports, and conduct in-

person presentation of results (if required in the DO). Phase II shall always be contingent upon receipt of proper approval. If such approval for the survey is not obtained, Phase II will not be authorized and no payment for any tasks under Phase II will be made to the Contractor.

Medium-Term (MT) Program

Applicable Areas. The MT Program is intended to give ARI the ability to conduct a limited number of research or studies and analysis efforts whose duration would not normally exceed 24 months after HumRRO receives a DO. The MT program may only be used for the procurement of non-personal services to perform the tasks specified in the DO, subject to the limitations set forth below.

Conditions of MT Program. This program is intended to resolve problems associated with manpower and personnel issues which require a somewhat longer period of performance than the QR program. The following conditions shall normally apply:

- Each of the MT efforts shall be completed within the period of time specified in the DO, with the maximum period normally being 24 months from the date of the DO.
- Each task of the DO shall be completed by the Contractor within the total time allocated and a final report delivered. Unless otherwise stated in the DO, the tasks to be performed by the Contractor shall include a meeting with ARI, in Alexandria, Virginia or at ARI Field Units, at the start of, and at the completion of, each MT Program DO.